



THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

STAFF REPORT

OF THE

ACCOUNTING DEPARTMENT

AND

UTILITIES DEPARTMENT



DOCKET NO. 95-006-E
DUKE POWER COMPANY

REPORT OF THE ACCOUNTING DEPARTMENT

OF

THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

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REPORT OF ACCOUNTING DEPARTMENT

DOCKET NO. 95-006-E

DUKE POWER COMPANY

ANALYSIS

The Accounting Department Staff has made a study of the books and records of Duke Power Company, Charlotte, North Carolina, relative to the Commission's requirement under Docket No. 95-006-E, that semiannual hearings be conducted before the Commission concerning the Adjustment of Base Rates for Fuel Costs.

CURRENT REVIEW PERIOD

The current investigation of Duke Power Company's Retail Fuel Adjustment Clause covers the period June 1995 through November 1995. Since the fuel hearing is scheduled for November 1995, Staff's audit covered through the month of September 1995, with the months of October and November 1995 estimated. In the last fuel hearing, fuel figures for April and May 1995 were estimated, therefore, Staff reviewed Duke's books and records for the period April 1, 1995 through September 30, 1995. The over-recovery amount for October 1995 and the under-recovery amount for November 1995 were estimated for the purpose of adjusting base rates effective December 1, 1995. The October and November 1995 estimates will be trued-up at Duke's next semiannual hearing after the costs are examined.

SCOPE OF STUDY

The Commission's Accounting Department's examination consisted of the following:

- Analysis of Fuel Stock Account # 151
- 2. Verification of Charges to Nuclear Fuel
 Expense Account # 518
- 3. Analysis of Purchased Power and Interchange (Net)
- 4. Verification of KWH Sales
- 5. Comparison of Coal Costs
- 6. An Analysis of Spot Coal Purchasing Procedures
- 7. Review of Duke Power Company's Coal Contract Buy-Out
- 8. Recomputation of Fuel Costs and Verification of Deferred Fuel Costs
- 9. Recomputation of True-up for (Over)Under-Recovered
 Fuel Costs

ANALYSIS OF FUEL STOCK ACCOUNT - ACCOUNT # 151

Staff's analysis of the Fuel Stock Account consisted of tracing receipts to and from the subsidiary ledgers to the General Ledger, reviewing monthly fuel charges originating in fuel accounting and insuring that only proper charges are entered in the Company's computation of fuel costs for purposes of adjusting base rates for fuel costs.

VERIFICATION OF NUCLEAR FUEL EXPENSE - ACCOUNT # 518

The Staff traced the expense amounts to the General Ledger. The expenses were also traced to filings to the Commission from the Company.

ANALYSIS OF PURCHASED AND INTERCHANGE POWER (NET)

Staff performed an examination of the Company's purchased power and interchange (Net) amount used in the Fuel Adjustment Clause.

Staff obtained the details of purchases and sales made by Duke

from and to other electric utilities. Staff verified all individual transactions of purchased and interchanged power to source documents. Staff verified amounts which are being used in computing total fuel costs for each month. These details allowed the Staff to identify fuel costs which were being passed through the clause in computing the factor above or below the base for each period.

VERIFICATION OF KWH SALES

The Accounting Department Staff reconciled the KWH sales as reported to the Commission through monthly fuel adjustment filings to the Company's monthly Financial and Operating Reports.

COMPARISON OF COAL COSTS

Staff prepared exhibits from Duke's books and records reflecting coal costs during the review period. Specifically, these exhibits are as follows:

Exhibit A - Coal Cost Statistics

Exhibit B - Received Coal-Cost Per Ton Comparison

With reference to Exhibit A, Coal Cost Statistics, Staff has shown a detailed analysis of spot and contract coal for the six (6)— month period April 1995 through September 1995. The detail gives emphasis to tons purchased, percentage of tons purchased, cost per ton delivered, total delivered cost, and cost per MBTU.

In Exhibit B, Received Coal-Cost Per Ton Comparison, Staff reflects the overall cost per ton of coal by month for the three major electric utilities regulated by this Commission.

ANALYSIS OF SPOT COAL PURCHASING PROCEDURES

The Accounting Staff examined the procedure followed by the Company's Fuel Purchasing Department for obtaining and accepting offers

on spot coal. To achieve this, Staff chose a month of the audit period that had received a large amount of spot coal. Staff examined spot coal proposals received in the month of August 1995.

The Fuel Purchasing Department maintains a list of coal vendors from whom proposals are received monthly.

These coal vendors send their proposals to Duke via Spot Coal Sales Proposal Data Sheets, with each proposal or offer on a separate sheet.

If the Company decides to purchase spot coal in a given month, then the proposals are evaluated. For evaluation purposes, the spot coal sales proposals are compiled on an Evaluation of Spot Bids computer run and are ranked by the cost per MBTU. The purchasing agents consider at least three factors when they agree to the spot coal offers: (a) the price per ton (including freight), (b) the BTU, ash, and sulfur content of the coal offered, and (c) the past experience with the supplier and the coal obtained from the producer. The Company's purchasing agents determine the current market price for spot coal prior to negotiating with the coal vendors. In this way, the agents determine the limits they should stay within when bargaining for coal. The agents bargain over the price of the coal, and either accept (the original offer or a counter offer) or reject the coal vendor's offer.

Upon acceptance of an offer, the Fuel Purchasing Department prepares a purchase order, a copy of which is mailed to the coal vendor. When the coal is received at the plant, the Company analyzes the coal for BTU, ash, and sulfur content and prepares a coal analysis report which is sent to the Fuel Purchasing Department. The appropriate

premium or penalty on the coal is determined by the Fuel Purchasing Department, and the results are forwarded to the Company's Accounting Section, which in turn, adds a premium or assesses a penalty to the total amount due to the coal vendor.

The Fuel Purchasing Department closely monitors the quality of coal shipped by the various producers. If poor performance is rendered by a certain producer, the purchasing agent records it and considers this when analyzing any future offers from the supplier.

As mentioned previously, Staff examined spot coal offers received for the month of August 1995. Staff obtained the Company's Evaluation of Spot Bids computer run for the month. The Evaluation of Spot Bids run is listed alphabetically by plant, with each plant's spot coal offers ranked by cost per MBTU. Also included on the Evaluation of Spot Bids run is the name of the coal company, the name of the producer, number of tons offered, coal specifications, the number of tons purchased, the plant to which the coal was shipped, or a reason for rejecting the offer.

During the month, 31 offers were submitted and Duke accepted 18 offers.

REVIEW OF DUKE POWER COMPANY'S COAL CONTRACT BUY-OUT

On August 9, 1995, Duke Power Company requested a Commission accounting order which would give Duke Power Company authorization to defer costs the Company anticipated incurring in association with one of its existing coal contracts and to amortize such costs to the cost of fuel burned. The costs, which total \$23,024,789.75, are coal contract buy-out costs which Duke Power Company and one of its contract coal suppliers, Westmoreland Coal Sales Company, negotiated to buy out

Duke Power Company's obligation to purchase coal during the remaining period of the existing contract--August 1995 through July 1996. Duke Power Company felt that they could purchase replacement coal at prices lower than the prices pertaining to the existing considerably Westmoreland contract. Duke Power Company stated, in its request letter to the Commission, that Duke Power was confident the cost of replacement coal plus the proposed deferral (which is the cost of the contract buy-out) when compared to the cost which would have been incurred under the existing contract would provide a substantial net benefit to customers. The Company, therefore, requested authorization defer the buy-out payment in Account No. 186 - Miscellaneous Deferred Debits, and to amortize the buy-out cost to Account No. 501 -Fuel for at least a twelve-month period beginning in September Fossil A twelve-month time period was chosen, as stated in the 1995. Company's request letter, to cover the same time period (twelve months remained on the existing contract) that savings on replacement coal purchases would likely be realized. Also, September 1995 begins the amortization period because the Company noted that any purchases of replacement coal in August 1995 would not likely impact the cost of fuel burned until September 1995.

On August 22, 1995, the Commission approved Duke Power Company's request, for accounting purposes only, to reflect the buy-out costs in the aforementioned accounts with a twelve-month amortization period. The Commission noted that amortization will only be allowed to the extent that savings on replacement coal purchases are realized. The Commission also noted that the Commission reserves the right to review the economics of the Company's transaction in the Company's fuel clause

adjustment proceedings.

During this audit review period of the Company's fuel adjustment clause, April 1995 through September 1995, Staff reviewed the savings associated with the replacement coal purchases plus the amortization of the contract buy-out versus the Company's original coal contract costs. The replacement coal purchases, which were purchased in August and September 1995, consisted of spot market coal and coal purchased from another coal contract supplier. Staff reviewed the costs of the replacement coal purchases, compared those costs to the original contract costs and then reduced the net result of the aforementioned costs by the monthly amortization of the contract buy-out, which is \$1,918,732 per month, for the months of August and September 1995. Staff notes that only one month's actual amortization is reflected per However, for calculation purposes to September 1995. books as of the cumulative net savings (net of the buy-out amortization) determine associated with replacement coal purchased in August and September 1995, Staff included the monthly amortization that will be reflected per books in October 1995. Therefore, the cumulative net savings as of September 30, 1995 (including the monthly amortization for October 1995 which would be applicable to September 1995 purchases) totals \$3.7 million.

RECOMPUTATION OF TRUE-UP FOR (OVER) UNDER-RECOVERED FUEL COSTS

Staff analyzed the cumulative over-recovery of fuel costs that the Company had incurred for the period April 1, 1995 through September 30, 1995 totaling \$624,817. Based on estimated figures for the months of October and November 1995, Staff arrived at an cumulative over-recovery of \$841,939. As stated in Duke Power Company's Adjustment for Fuel

Costs, fuel costs will be included in base rates to the extent determined reasonable and proper by the Commission for the succeeding six months or shorter period. Accordingly, the Commission should consider the over-recovery of \$841,939 along with the anticipated fuel costs for the period December 1, 1995 to May 31, 1996, for the purpose of determining the base cost of fuel in rates effective December 1, 1995.

This over-recovery figure of \$841,939 was provided to the Commission's Utilities Department.

RESULTS OF EXAMINATION

Based on the Accounting Staff's examination of Duke Power Company's books and records, and the utilization of the fuel cost-recovery mechanism as directed by this Commission, the Accounting Staff is of the opinion that the Company has complied with the directives (per the Fuel Adjustment Clause) of the Commission.

EXHIBITS

Exhibits relative to this report are identified as follows:

EXHIBIT A: COAL COST STATISTICS

In Exhibit A, Coal Cost Statistics, Staff compares spot, contract and total coal received for the months of April 1995 through September 1995. The comparison is made in the following areas:

- 1. Tons Purchased
- 2. Percentage of Total Tons Purchased
- 3. Received Cost Per Ton
- 4. Total Received Cost
- 5. Cost Per MBTU

EXHIBIT B: RECEIVED COAL-COST PER TON COMPARISON

In Exhibit B, Staff has shown for comparison purposes, the freight cost per ton, mine cost per ton, the total cost per ton, and the cost per MBTU of received coal for Duke Power Company, Carolina Power & Light Company, and South Carolina Electric & Gas Company. The cost per ton shown for the period April 1995 through September 1995 included both spot and contract purchases, and were extracted from required filings for Carolina Power & Light Company and South Carolina Electric & Gas Company, and from Duke Power Company's 2121 Run.

EXHIBIT C: DETAIL OF NUCLEAR COST

In Exhibit C, Staff has shown in detail, the two components in total nuclear costs. These components are as follows:

- 1. Burn-up Cost
- 2. Disposal Cost

EXHIBIT D: TOTAL BURNED COST (FOSSIL AND NUCLEAR)

This exhibit reflects the dollar amounts of burned costs, and the percentage of the Total Burned Costs for fossil and nuclear fuel by months from April 1995 through September 1995.

EXHIBIT E: COST OF FUEL

In Exhibit E, Staff has computed the total fuel cost applicable to the factor computation. There are three (3) components used in arriving at this cost. Those components are as follows:

- 1. Cost of Fuel Burned...This amount is the burned cost of all fossil and nuclear fuel during the period. A detailed breakdown between coal, oil, gas and nuclear fuel can be seen in Exhibit D.
- 2. Purchase and Interchange Power Fuel Cost... This amount is the monthly KWH's delivered to or received by one electric utility system

from another.

3. Fuel Cost Recovered through Intersystem Sales... This amount is the fuel-related cost on KWH's sold during the period to Yadkin, Inc. and other electric utilities.

Total fuel cost applicable to the factor is computed by adding the cost of fuel burned to purchased power and interchange power fuel cost. This amount is then reduced by fuel associated with intersystem sales.

EXHIBIT F: FACTOR COMPUTATION

Staff has computed the Fuel Cost Adjustment Factor by month beginning with April 1995 and going through September 1995. In computing this factor, total fuel cost applicable to the FAC is divided by total system sales, excluding intersystem sales. This results in fuel cost per KWH. The fuel cost per KWH is then compared to the base cost per KWH as ordered by the Commission. This variance is reflected as the monthly fuel cost adjustment factor.

EXHIBIT G: S.C. RETAIL COMPARISON OF FUEL REVENUES AND EXPENSES

Shown in this exhibit is the computation of the cumulative over-recovery at November 30, 1995.

ACCOUNTING EXHIBIT A

DUKE POWER COMPANY COAL COST STATISTICS APRIL 1995 - SEPTEMBER 1995

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MONTH	TONS RECEIVED	%	COST/TON RECEIVED	TOTAL RECEIVED COST	\$/MBTU
	TONS	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	\$	\$	\$
APRIL 1995	45,846.65	5.88	32.92	1,509,226.79	1.2774
MAY 1995	34,733.80	3.82	31.11	1,080,462.77	1.2344
JUNE 1995	51,704.40	5.31	32.31	1,670,695.27	1.2893
ULY 1995	38,744.45	4.58	35.01	1,356,289.87	1.3872
UGUST 1995	220,755.70	19.95	34.84	7,691,235.25	1.3758
SEPTEMBER 1995	445,302.85	39.10	35.02	15,594,307.20	1.4185
ROTEAT C	837,087.85			28,902,217.15	
TOTALS	037,007.03				

CONTRACT

MONTH	TONS RECEIVED	%	COST/TON RECEIVED	TOTAL RECEIVED COST	\$/MBTU
APRIL 1995 MAY 1995 JUNE 1995 JULY 1995 AUGUST 1995 SEPTEMBER 1995	TONS 733,684.65 874,487.75 921,135.15 806,473.50 885,887.10 693,551.55	% 94.12 96.18 94.69 95.42 80.05 60.90	\$ 42.71 43.16 43.10 43.27 43.75 41.87	\$ 31,337,721.10 37,742,818.79 39,700,232.53 34,899,873.01 38,754,847.83 29,040,360.82	\$ 1.7089 1.7226 1.7340 1.7313 1.7461 1.6757
TOTALS	4,915,219.70			211,475,854.08	

COMBINED

MONTH	TONS RECEIVED	%	COST/TON RECEIVED	TOTAL RECEIVED COST	\$/MBTU
APRIL 1995 MAY 1995 JUNE 1995 JULY 1995 AUGUST 1995 SEPTEMBER 1995	TONS 779,531.30 909,221.55 972,839.55 845,217.95 1,106,642.80 1,138,854.40	% 100.00 100.00 100.00 100.00 100.00	\$ 42.14 42.70 42.53 42.89 41.97 39.19	\$ 32,846,947.89 38,823,281.56 41,370,927.80 36,256,162.88 46,446,083.08 44,634,668.02	\$ 1.6828 1.7039 1.7102 1.7154 1.6716 1.5759
TOTALS	5,752,307.55			240,378,071.23	

ACCOUNTING EXHIBIT B

DUKE POWER COMPANY RECEIVED COAL - COST PER TON COMPARISON APRIL 1995 - SEPTEMBER 1995

DUKE POWER COMPANY

MONTH	INVOICE COST	FREIGHT COST	TOTAL COST	COST PER
	PER TON	PER TON	PER TON	MBTU
APRIL 1995	\$	\$	\$	\$
	32.20	9,94	42.14	1.6828
MAY 1995	32.78	9.92	42.70	1.7039
JUNE 1995	32.57	9.96	42.53	1.7102
JULY 1995	32.58	10.31	42.89	1.7154
AUGUST 1995	30.06	11.91	41.97	1.6716
SEPTEMBER 1995	28.45	10.74	39.19	1.5759

CAROLINA POWER & LIGHT COMPANY

MONTH	INVOICE COST PER TON	FREIGHT COST PER TON	TOTAL COST PER TON	COST PER MBTU
	\$	\$	\$	\$
APRIL 1995	29.90	10.24	40.14	1.5983
MAY 1995	28.59	10.74	39.33	1.5805
JUNE 1995	45.47	11.11	56.58	2.2822
JULY 1995	31.13	11.45	42.58	1.7007
AUGUST 1995	33.32	11.28	44.60	1.7844
SEPTEMBER 1995	31.34	11.40	42.74	1.7176

SOUTH CAROLINA ELECTRIC & GAS COMPANY

MONTH	INVOICE COST PER TON	FREIGHT COST PER TON	TOTAL COST PER TON	COST PER MBTU
	\$	\$	\$	\$
APRIL 1995	26.78	14.24	41.02	1.5783
MAY 1995	26.85	14.06	40.91	1.5717
JUNE 1995	26.98	14.23	41.21	1.5912
JULY 1995	26.48	14.17	40.65	1.5631
AUGUST 1995	27.14	13.58	40.72	1.5728
SEPTEMBER 1995	25.76	14.05	39.81	1.5348

ACCOUNTING EXHIBIT C

DUKE POWER COMPANY DETAIL OF NUCLEAR COST APRIL 1995 - SEPTEMBER 1995

MONTH	BURN-UP COST	DISPOSAL COST	TOTAL NUCLEAR COST
	\$	\$	\$
APRIL 1995 MAY 1995 JUNE 1995 JULY 1995 AUGUST 1995 SEPTEMBER 1995	15,657,696 14,778,444 14,450,349 15,230,974 17,445,113 16,268,619	3,119,812 2,970,688 2,875,349 2,901,002 3,459,515 3,281,000	18,777,508 17,749,132 17,325,698 18,131,976 20,904,628 19,549,619
TOTAL	93,831,195	18,607,366	112,438,561

ACCOUNTING EXHIBITY D

DIKE POVER COMPANY TOTAL BURNED COST (FOSSIL AND NUCLEAR) APRIL 1995 - SEPTEMBER 1995

D. WONTER	176		8	t	ĉ	t		١	TOTAL
	JAM	,	Ö	ОП	CAS.	S	NUCLEAR	¥	COST
	❖	*	€¢.	%	\$	%	\$	3%	\$
APRIL 1995	25,158,954	55.49		2.08	460,924		18,777,508	41.41	45,340,310
35	40,277,596	68.38		8.	474,895		17,749,132	30.03	58,986,646
995	44,605,210	71.03		8.	303,880		17,325,698	27.59	62,796,931
995	63, 224, 161	76.77	535,050		458,730	35	18,131,976	22.02	82,349,917
1995	62,762,492	71.76		1.39	2,583,147		20,904,628	3.9	87,462,964
BER 1995	32,397,365	61,49		19	391 042		19 549 619	37 10	52, 688, 170

ACCOUNTING EXHIBIT E

DUKE POWER COMPANY COST OF FUEL APRIL 1995 - SEPTEMBER 1995

MONTH	TOTAL COST OF FUEL BURNED	PURCHASE AND INTERCHANGE POWER FUEL COST	FUEL COST RECOVERED INTERSYSTEM SALES	TOTAL FUEL COST
	\$	\$	\$	\$
APRIL 1995	45,340,310	5,002,054	(3,042,908)	47,299,456
MAY 1995	58,986,646	4,533,455	(3,875,294)	59,644,807
JUNE 1995	62,796,931	5,493,244	(3,630,417)	64,659,758
JULY 1995	82,349,917	5,075,095	(5,984,414)	81,440,598
AUGUST 1995	87,462,964	6,348,898	(11,918,401)	81,893,461
SEPTEMBER 1995	52,688,170	5,391,544	(3,294,103)	54,785,611
TOTALS	389,624,938	31,844,290	(31,745,537)	389,723,691
	=======================================	.========	= ========	

DUKE POWER COMPANY FACTOR COMPUTATION APRIL 1995 - SEPTEMBER 1995

Duke Power Company
S.C. Retail Comparison of Fuel Revenues & Expenses
April 1995 - November 1995

			ACT	стиаг		·	と 日本の は	MATED
	April	May	June	July	August	September		November
Description	1995	1995	1995	1995	1995	1995	1995	1995
Fossil Fuel	26,562,802	41,237,514	45,471,233	64,217,941	66,558,336	33,138,551	34.395.000	39,549,000
Muclear	18,777,508	17,749,132	17,325,698	18,131,976	20,904,628	19,549,619	19.272.000	16.120,000
Purchased Power	5,002,054	4,533,455	5,493,244	5,075,095	6,348,898	5,391,544	1,701,000	2,487,000
Subtota]	50,342,364	63,520,101	68,290,175	87,425,012	93.811.862	58.079.714	55 368 000	58 156 000
Less: Fuel Cost Recovered				•			200	200 100 100
through Intersys. Sales	3,042,908	3,875,294	3,630,417	5,984,414	11,918,401	3,294,103	2,914,000	2,874,000
FIRT. COST	47 200 455	100 644	4					
Total System KWH Sales	001,001,00	100,240,00	64,639,738	81,440,598	81,893,461	54,785,611	52,454,000	55,282,000
Excluding Inters. Sales	5,297,662,000	5,505,538,000	6,054,076,000	6,642,172,000	7.421.193.000	6.553 880 000	5 591 254 000	244 040
\$/KWH Sales	.008928	.010834	.010680	.012261	.011035	65800.		01054447746
Less: Base \$/KWH Sales	.010000	.010000	.010000	.010000	.010000	000010.	010000	.010000
Fuel Adjustment Per KWH	(00100)	7.68000	00000					
The state of the s	(NOW PEC COL .	France:	000000	T97700.	.001035	(.001641)	(-000619)	.000546
SC AMB SALES	1,593,0/4,000	1,680,106,000	1,782,042,000	1,868,381,000	2,096,167,000	1,914,643,000	1,703,187,000	1,533,244,000
(Over) Under-Recovery	(1,707,775)	1,401,208	1,211,789	4,224,409	2.169.533	(3 141 020)	(1 054 233)	100
Cumulative (Over)/Under			•			(1771444)	(0/8/2001)	101,100
Recovery from March 1995	(4,782,052)*				:			
Cumulative (Over)/Under								
Recovery This Period	(6.489.827)	(5,088,619)	(3.876,830)	347.579	2,517,112	(624.817)	(1,679,090)	(841,939)

Note:

No. 95-005-E. The Company's March 1995 cumulative balance of \$4,616,000 (per the Company's testimony in Docket No. 95-006-E) does not reflect the refund at that already reflects an additional Department of Energy (DOE) refund pertaining to nuclear fuel disposal costs as reflected in Staff's last fuel report per Docket * It should be noted that Staff's and the Company's March 1995 cumulative over-recovery balances differ. Staff's March 1995 cumulative balance of \$4,782,052 point. However, as stated in the Company's testimony in Docket No. 95-006-E, the additional refund is reflected in the cumulative balance as of April 1995.